



PGMM

XM395

Precision Guided Mortar Munition

7th International Artillery & Indirect Fire Symposium

19 June 2002

LTC Larry Hollingsworth
PM Mortars

PEO Ammunition

Mission



Serve as **Life Cycle Manager** for development, acquisition, production, fielding, sustainment, and product improvement of the full range of **mortar platforms, fire control systems, and ammunition** integrated across **Legacy, Interim and Objective Forces**.

...Product Manager, Mortar Systems Charter June 2001

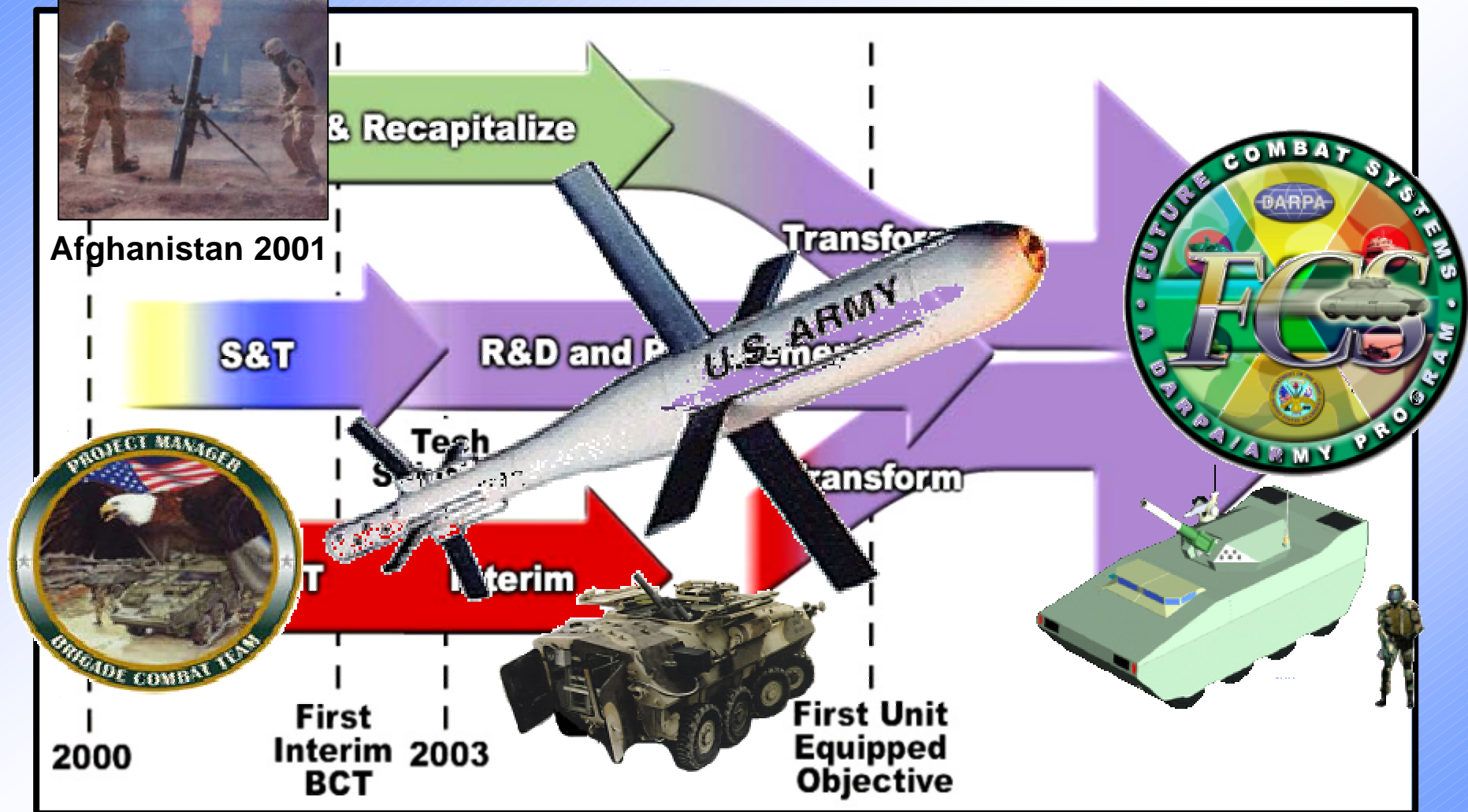
Vision

Develop Systems that serve as the Maneuver Commander's Responsive, Lethal and Accurate Indirect Fire Weapon of Choice for Engaging Targets in his Area of Operation.

Mortars and Army Transformation



Afghanistan 2001



120mm PGMM is Lethality for Army Transformation

DCD Firepower Priorities



Mortar Ballistic Computer (Light)

Mortar Fire Control System

Precision Mortar Munitions

IR Illumination

120mm DPICM Munition

Arms Room Concept

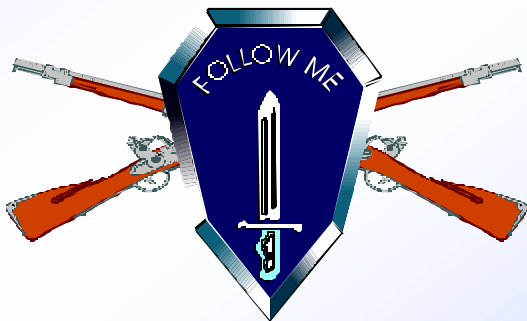
Lightweight Mortars

81mm Training Insert for 120mm Mortar

Improved Range and Lethality

Objective Force Platform

The Objective Force...



Responsive

Deployable

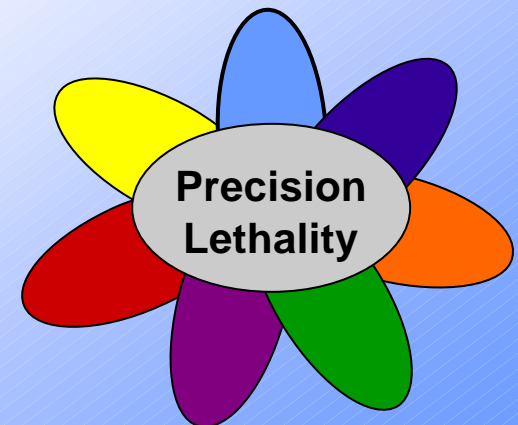
Agile

Versatile

Lethal

Survivable

Sustainable



Organic Precision Lethality



Brains

XM95 MFCS

Mortar Fire Control System

- Increased Responsiveness through Digital Communications
- Leap Ahead Weapon Accuracy



**PGMM
MFCS
120mm Mortar System**

**Precision Lethality ...
at the Point of the Spear**

Brawn

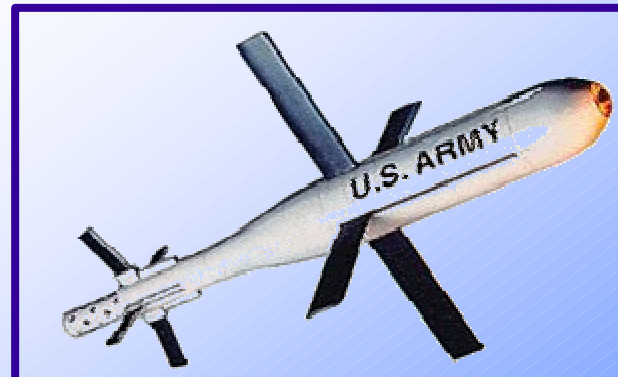
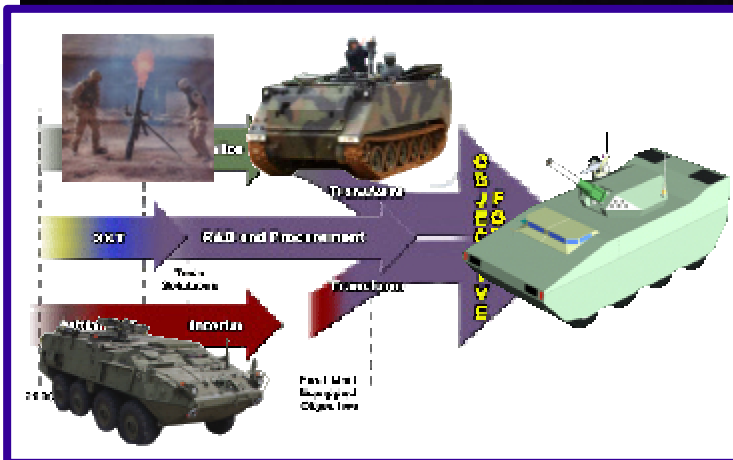
120mm Mortar Systems

Legacy: Ground & Carrier Mounted

Interim: IAV-MC for the IBCT

Objective: Turreted Mortar

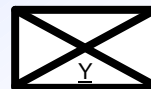
Destruction



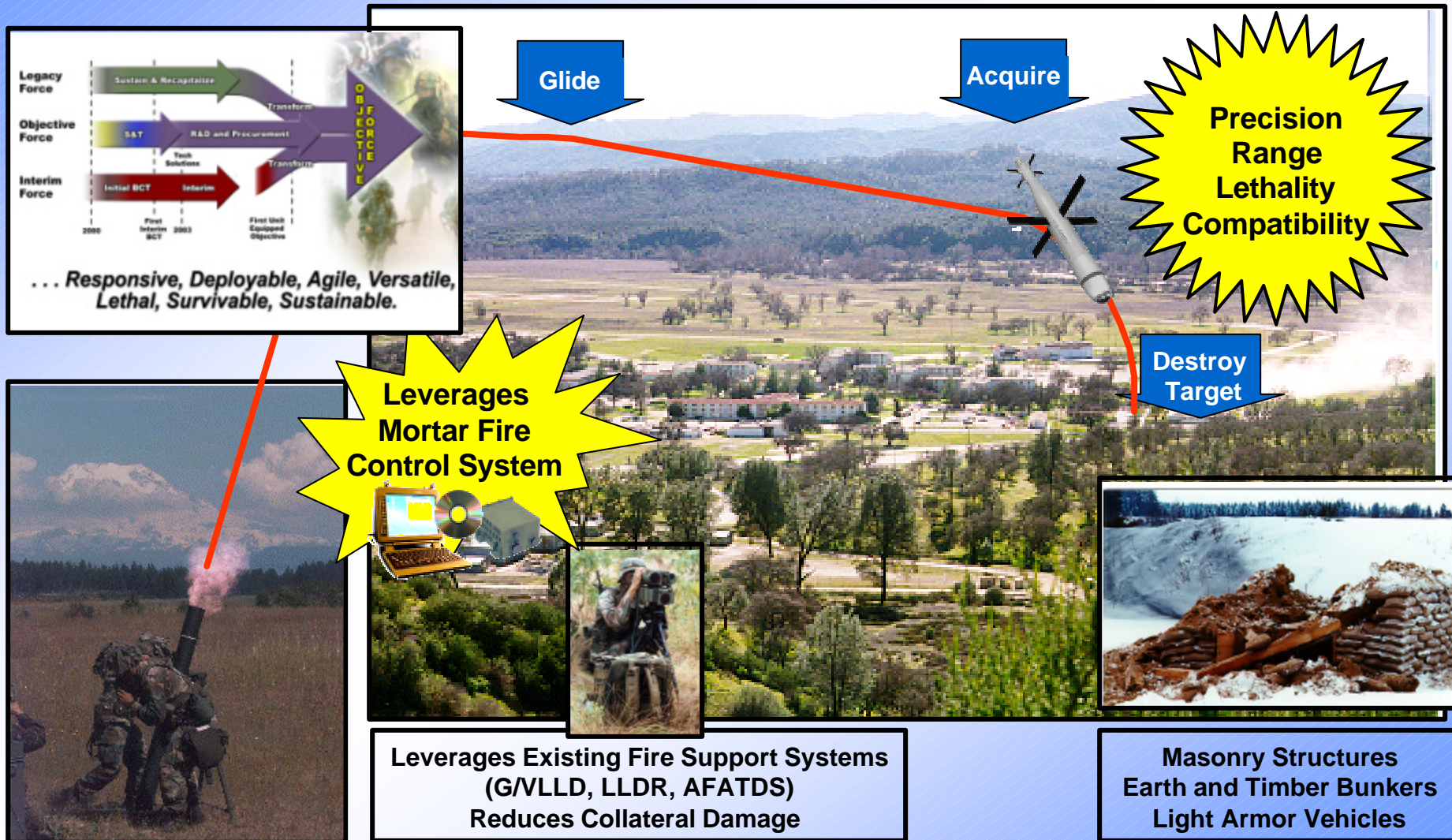
XM395 PGMM

- Precision
- Lethality
- Extended Range
- Compatibility with the Battalion Fire Support System

PGMM Operations






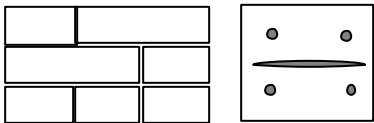
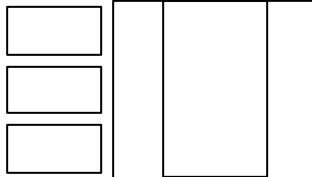
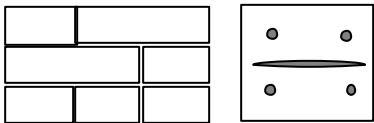
RGR



Precision Munitions Increase Warfighter Effectiveness

Key Performance Parameters*

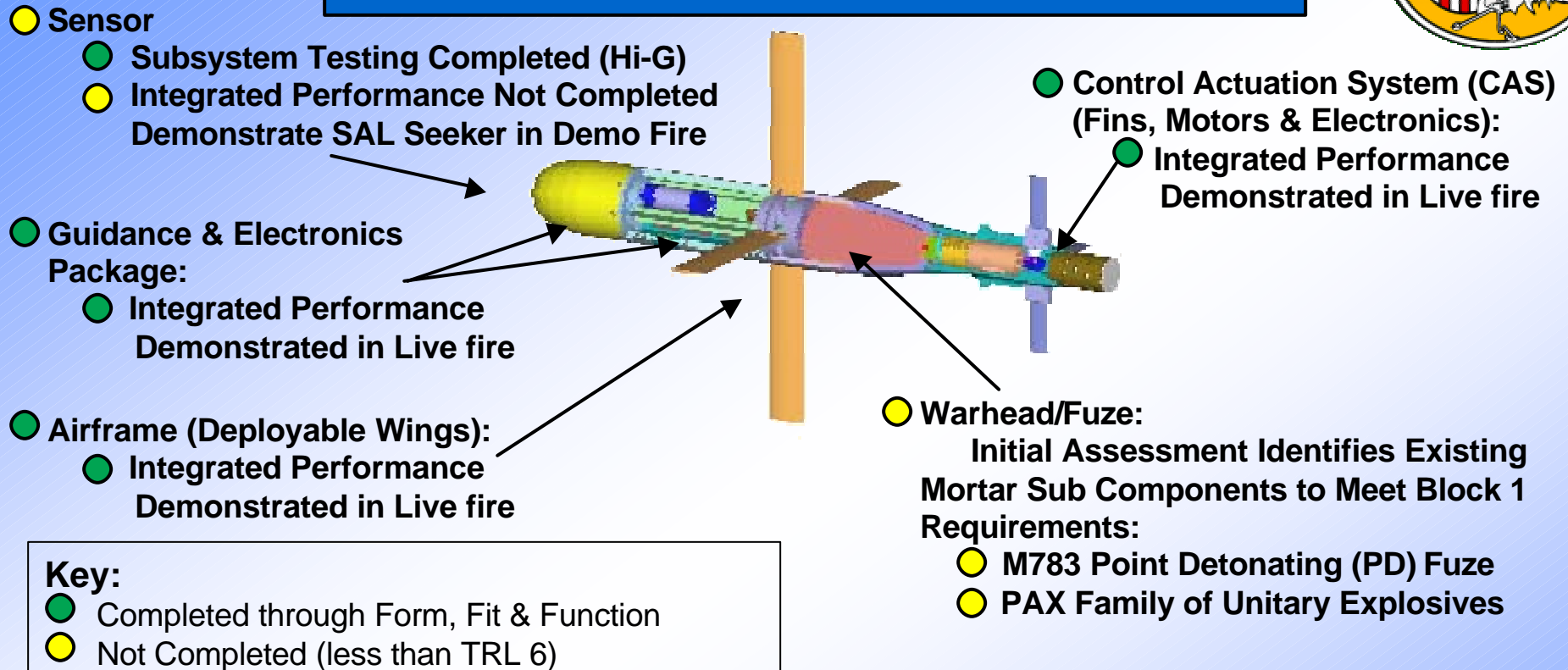


Key Performance Parameters	Block 1	Block 2	Block 3
Precision: Fire on Point Targets with Precision	 		 <ul style="list-style-type: none"> • Moving Lightly Armored Vehicles • Additional Masonry Walls 
Lethality: Incapacitate Personnel protected within and by those point targets	<ul style="list-style-type: none"> • Stationary Lightly Armored Vehicles • Earth & Timber Bunkers • Masonry Walls (Brick/Block) 		
Range: Engage targets at extended ranges and targets that are masked by terrain & buildings	<ul style="list-style-type: none"> • Engage targets out to 7.2 km 	<ul style="list-style-type: none"> • Engage targets out to 10km (T), 12 km (O) 	<ul style="list-style-type: none"> • Engage targets out to 12km (T), 15 km (O) • Maneuver off Gun Target Line (GTL)
Compatibility: Compatible with the existing Battalion indirect fire system	<ul style="list-style-type: none"> • All existing 120mm Battalion indirect fire systems 	<ul style="list-style-type: none"> • All existing 120mm Battalion indirect fire systems 	<ul style="list-style-type: none"> • All existing 120mm Battalion indirect fire systems

* Block 2 & 3 Requirements Subject to Change based on results of PGMM Analysis of Alternatives



PGMM Technical Status

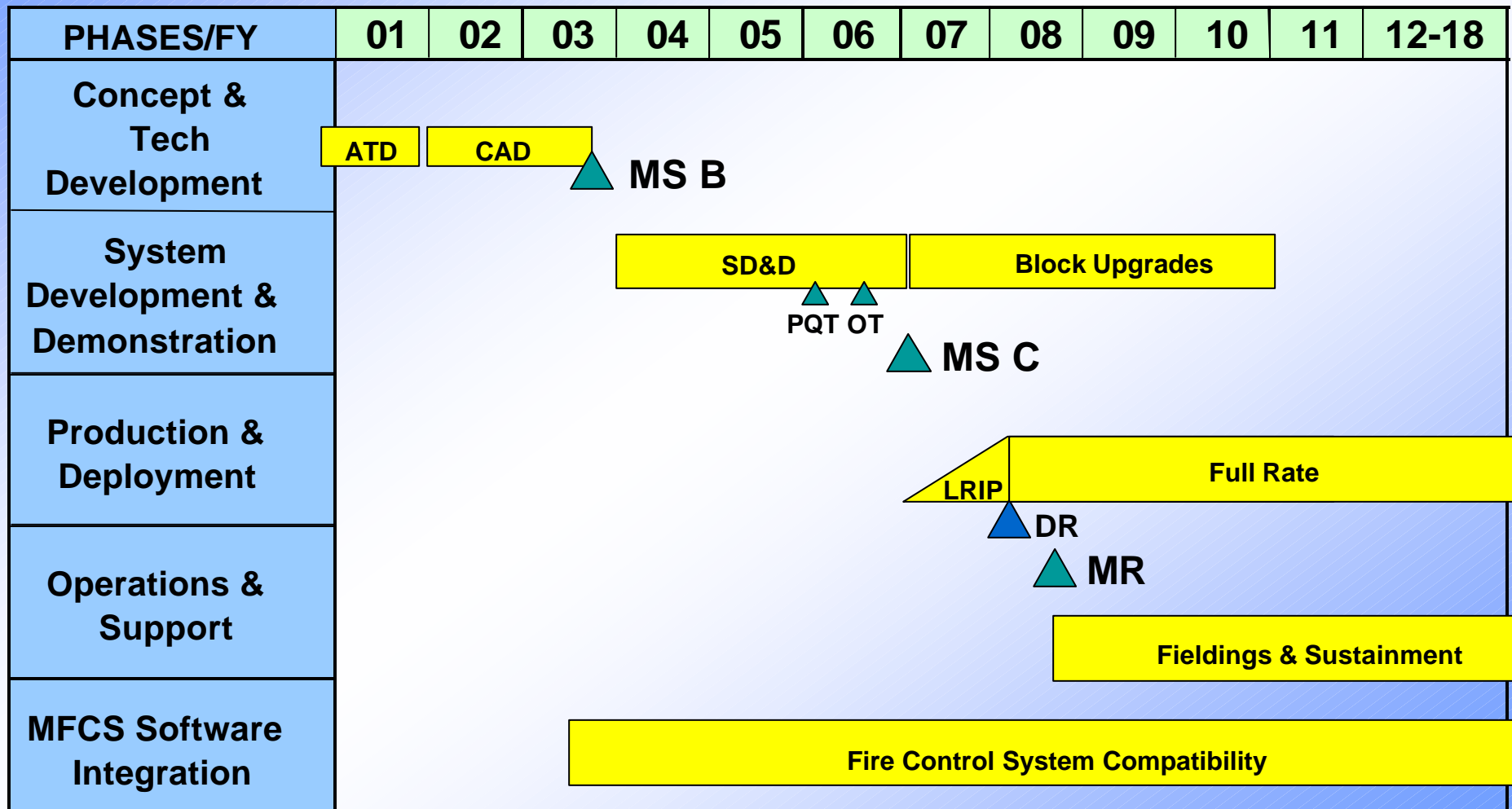


Subsystem	TRL*	Current Status
Guidance Package	6	Subsystem Live Fire Complete, Performed in System Demo (OCT 01)
Airframe	6	Subsystem Live Fire Complete, Performed in System Demo (OCT 01)
CAS	6	Subsystem Live Fire Complete, Performed in System Demo (OCT 01)
Sensor	5	Subsystem Live Fire Complete, Not Validated in System Demo
Warhead/Fuze	3	FY02/03 CAD Program Focused on Increasing TRL

PGMM ATD Design Assessed at TRL 5

* Determined by the Warfighter Technology Council (Aug 01)

Current PGMM Program Plan



Summary



- **Supports Army Transformation**
- **Leverages Mortar Fire Control System**
- **Organic to All Maneuver Commanders**
- **PGMM**
 - **Is Executable**
 - **Operational Requirements are Achievable**
 - **Operational Requirements are Blocked**
 - **Leverages Conventional Family of Munitions**
 - **Provides Organic Precision to the Maneuver Commander**
 - **Critical to BCT and FCS**